

M 5.7, 21km SE of Chaloe Phra Kiat, Thailand

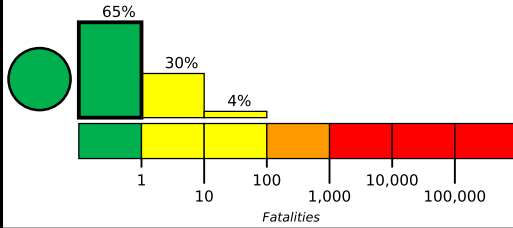
Origin Time: 2019-11-20 21:03:57 UTC (Thu 04:03:57 local)

Location: 19.4377° N 101.2241° E Depth: 10.0 km

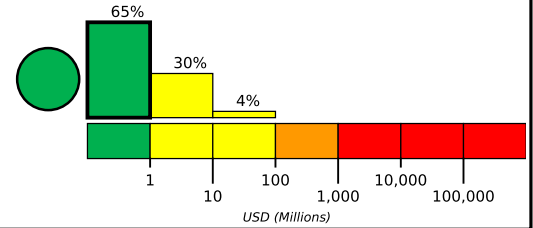
Created: 2 hours, 1 minute after earthquake

Estimated Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.



Estimated Economic Losses

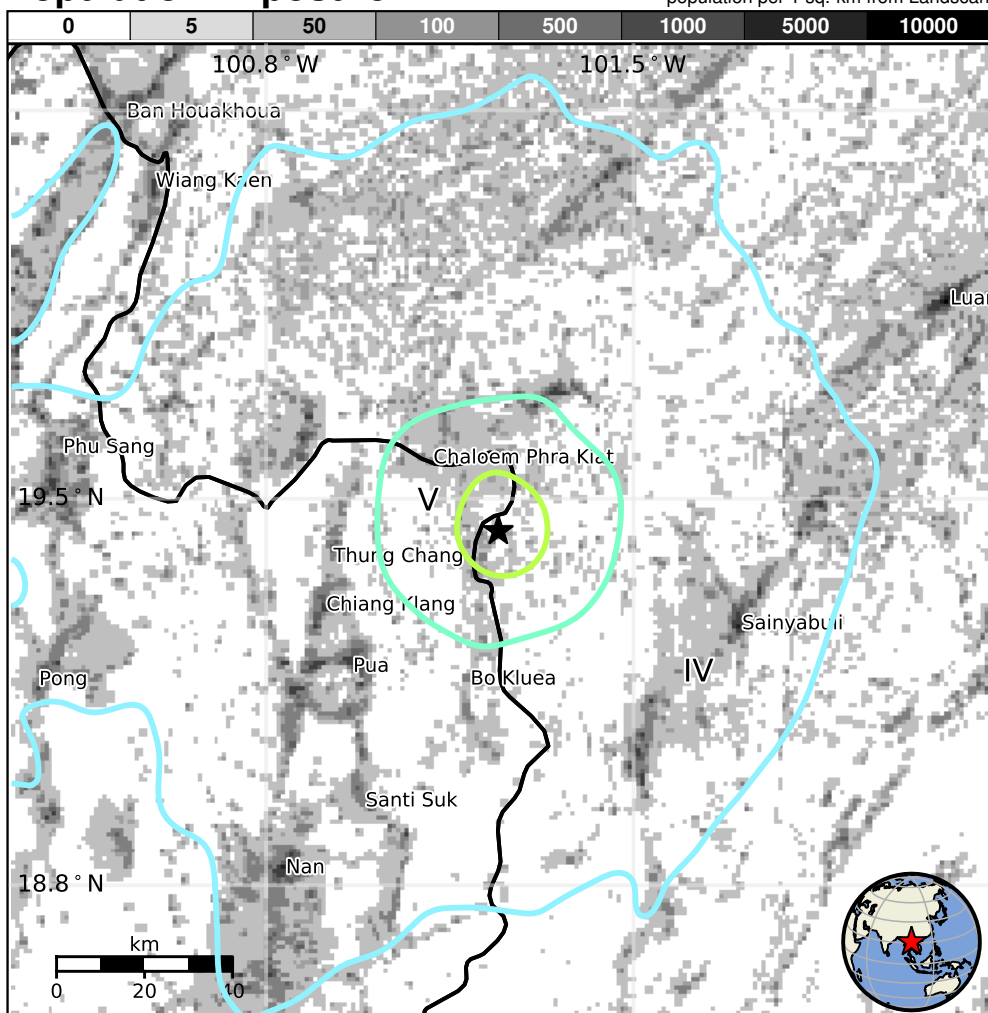


Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)	—*	383k*	1,139k	63k	10k	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure



Structures

Overall, the population in this region resides in structures that are vulnerable to earthquake shaking, though resistant structures exist. The predominant vulnerable building types are informal (metal, timber, GI etc.) and unknown/miscellaneous types construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1973-08-16	396	6.4	IX(20k)	1
2007-06-02	398	6.1	IX(2k)	3
1995-07-11	356	6.8	IX(3k)	11

Recent earthquakes in this area have caused secondary hazards such as landslides that might have contributed to losses.

Selected City Exposure

from GeoNames.org

MMI	City	Population
V	Chaloe Phra Kiat	<1k
V	Thung Chang	<1k
IV	Chiang Klang	13k
IV	Sainyabuli	14k
IV	Pua	<1k
IV	Tha Wang Pha	<1k
IV	Nan	25k
IV	Ban Houakhoua	16k
IV	Chiang Khong	15k
IV	Luang Prabang	47k
III	Ban Houayxay	12k

PAGER content is automatically generated, and only considers losses due to structural damage.

Limitations of input data, shaking estimates, and loss models may add uncertainty.

<https://earthquake.usgs.gov/earthquakes/eventpage/us70006anm#pager>

bold cities appear on map.

(k = x1000)

Event ID: us70006anm